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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,319	02/12/2004	Kyool Seop Lee	13921-002002	5588
26161	7590	03/22/2006	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			JUSKA, CHERYL ANN	
			ART UNIT	PAPER NUMBER
			1771	
DATE MAILED: 03/22/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

CML

**Office Action Summary**

Application No.

10/777,319

Applicant(s)

LEE ET AL.

Examiner

Cheryl Juska

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 10/077310.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed January 10, 2006, has been entered. Claims 1-10 have been canceled, while claim 11 has been amended as requested. Claim 11 is the only pending claim. Additionally, applicant's amendments to the specification have been entered as requested.
2. Said amendment is sufficient to withdraw the objection to the specification as set forth in section 1 of the last Office Action. Additionally, said amendment is sufficient to withdraw the 112, 1<sup>st</sup> and 2<sup>nd</sup> rejections set forth in sections 2-9 of the last Office Action. Furthermore, the 101 rejection set forth in sections 10 and 11 is hereby withdrawn due to said amendment. In other words, all of the standing rejections are hereby withdrawn. However, the following new rejections necessitated by said amendment are set forth below.

### ***Drawings***

3. The drawings were received on January 10, 2006. These drawings are accepted.

### ***Specification***

4. The amendment filed January 10, 2006, is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

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(a) “in which 200 to 240 g of the (twisted) yarns are (preferably) put on each meter of a metal plate of the heat-setting device,”

(b) “weight of the (grey) yarns on each meter of a metal plate,” and

(c) “density here refers to the weight of a grey yarn on each meter of a band.”

5. Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 11 is rejected for new matter for the phrase “wherein 200 to 240 g of the yarns are put on each meter of a metal plate of the heat-setting device.” The specification as originally filed does not provide adequate support the new subject matter. Applicant has deleted the phrase “with a density of 200 to 240 g/m” and replaced it with the new subject matter. Applicant asserts that the density phrase was “erroneous” and asserts the new subject matter is “entirely feasible” (Amendment, page 10, 1<sup>st</sup> paragraph). While the examiner does not doubt the feasibility of the subject matter, it is asserted that said subject matter is not supported by the specification as originally filed. Nor has applicant provided sufficient reasoning or evidence that difference in

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subject matter was due to an obvious error that one skilled in the art would not only recognize as an error, but also recognize an appropriate correction. Note *In re Odd*, 443 F.2d 1200, 170 USPQ 268 (CCPA 1971). Therefore, claim 11 is rejected as containing new matter.

***Claim Rejections - 35 USC § 102/103***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 11 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 6,242,091 issued to Howell et al.

Howell discloses carpets made of PTT yarns. The carpets are made by tufting yarns of crimped, ply twisted, bulked continuous filaments (BCF) (col. 1, lines 47-50). Said yarns have a denier per filament ranging from 4-25 and a total yarn denier ranging from 700-5000 (col. 1, lines 55-61). Specifically, a number of spun PTT filaments are bulked and/or entangled by means of a jet bulking unit and/or entangling unit (col. 3, lines 25-53). The bulked yarns are

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then cable twisted together in an amount ranging from 3.5-6.5 twists per inch (tpi) and heat set at a temperature of 270-290 F by way of an autoclave or Superba<sup>®</sup> heat-setting unit (col. 4, lines 27-32). The cabled and heat-set yarns are then tufted into a primary backing and a latex backcoat and secondary backing are applied (col. 4, lines 33-34). The carpets may have a cut loop pile height of 0.25-1 inch or a loop pile height of 0.125-0.375 inches (col. 4, lines 34-37). Additionally, Howell teaches a 160 hole spinneret that forms two 80 filament strands, wherein the filaments have a trilobal cross section and a modification ratio of 1.7 (col. 6, lines 37-41). Furthermore, Howell teaches cable twisting yarns of 4 plies with 4 tpi (col. 7, lines 42-45). Carpets made from said yarns are dyed in a Beck with disperse dyes (col. 7, lines 44-45).

Thus, Howell teaches the presently claimed invention with the exception of (a) the band speed of the heat-setting device, (b) the weight of the yarn on each meter of the metal plate of the heat-setting device, (c) the number of stitches per inch in the tufted carpet, (d) the lack of a carrier and the process conditions of the beck dyeing step, and (e) the claimed physical properties. However, it is noted that applicant is claiming a final product made by a recited process. As such, the process limitations are not necessarily given patentable weight at this time.

It is the examiner's position that the carpet of the Howell patent is identical or only slightly different than the presently claimed carpet prepared by the method presently claimed, because both are tufted carpets having cabled, heat-set PTT face yarns that are dyed with disperse dyes. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious variant from a product of the prior art, the claim is unpatentable even

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though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964. The burden has been shifted to the Applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289. Therefore, claim 11 is rejected as being anticipated by or obvious over the cited Howell patent.

***Claim Rejections - 35 USC § 103***

11. In the alternative, claim 11 is rejected under 35 USC 103(a) as being unpatentable over US 6,242,091 issued to Howell et al. in view of US 6,315,934 issued to Chuah.

In the event that the method limitations are given patentable weight in the product claim, the following rejection is made.

As previously noted, Howell teaches the presently claimed invention with the exception of (a) the band speed of the heat-setting device, (b) the weight of the yarn on each meter of the metal plate of the heat-setting device, (c) the number of stitches per inch in the tufted carpet, (d) the lack of a carrier and the process conditions of the beck dyeing step, and (e) the claimed physical properties.

With respect to the band speed and the weight of yarn on each meter, it is argued that these limitations are obvious over the cited Howell reference, since it has been held that where the general conditions of a claim are disclosed in the prior art, finding the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In the absence of unexpected results achieved from said band speed and yarn weight per meter, the limitations are held obvious over the prior art.

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With respect to the number of stitches per inch, applicant is hereby given Official Notice that carpets are typically tufted with a number of stitches per inch in the range disclosed. Thus, it would have been obvious to a person having ordinary skill in the art to tuft the Howell carpet with a stitch density in the range of 5-15 stitches per inch as claimed. Such a modification would have been motivated by the convention in the art. The Examiner notes that the facts asserted to be common and well-known are capable of instant and unquestionable demonstration as being well-known. To adequately traverse such a finding, applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art.

With respect to lack of carrier and the process conditions of the beck dyeing step, it is argued that this feature is well known in the art of carpeting. For example, Chuah discloses BCF, air entangled, twisted and heat-set PTT yarns for tufting into carpets. Additionally, Chuah teaches dyeing the tufted pile carpet with a disperse dye, without a carrier, at atmospheric boil (col. 8, lines 1-5). Thus, it would have been obvious to one skilled in the art to dye the PTT carpet of Howell with a disperse dye and no carrier at atmospheric pressure and a temperature of 90-100 C, since it is known in the art that disperse dyeing without carriers is suitable for PTT carpets, as evidenced by Chuah.

Regarding the recited physical properties, it is argued that said properties would necessarily be present in the carpet of Howell as modified by the Chuah teachings. Support for this argument is found in the use of like materials and like processes as described above. Like materials cannot have mutually exclusive properties. Therefore, claim 11 is rejected as being obvious over the cited prior art.



*Conclusion*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHERYL A. JUCUA  
PRIMARY EXAMINER

cj  
March 19, 2006